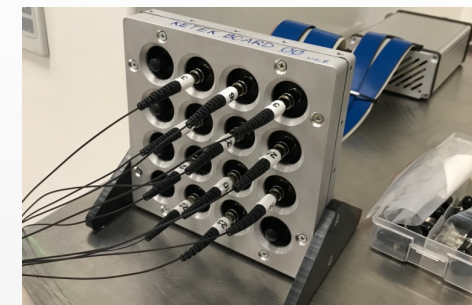


# ORIGIN, AN EU PROJECT TARGETING REAL-TIME 3D DOSE IMAGING AND SOURCE LOCALIZATION IN BRACHYTHERAPY: COMMISSIONING AND FIRST RESULTS OF A 16-SENSOR PROTOTYPE.

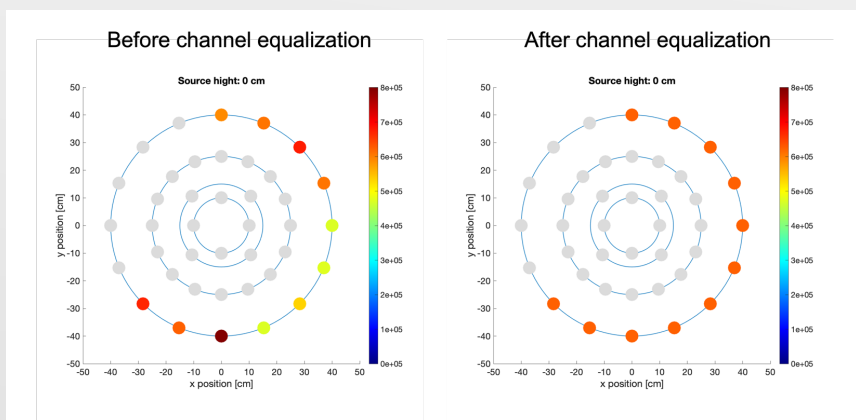
- The ORIGIN project addresses the urgent need to deliver more precise and effective Brachytherapy treatments
- Development of innovative optical fibre dosimeters with inorganic scintillators on the tip.

## BRACHYTHERAPY

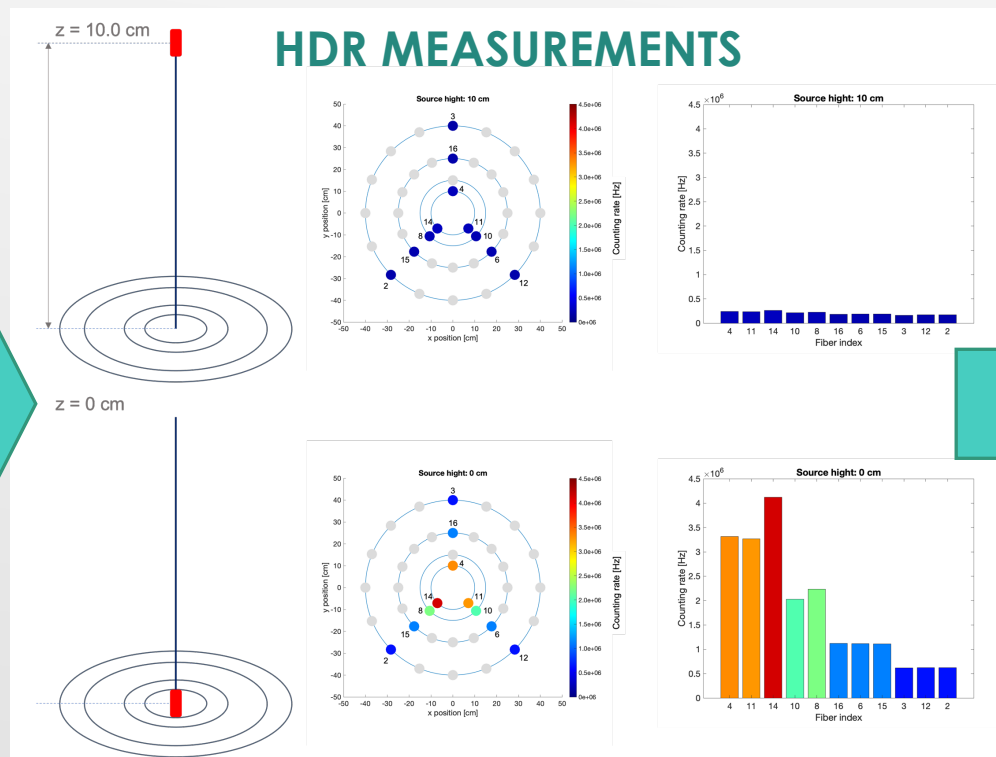
|     | Source            | Activity       | Implantation | $\langle E\gamma \rangle$ | $\lambda$ @ $\langle E\gamma \rangle$ |
|-----|-------------------|----------------|--------------|---------------------------|---------------------------------------|
| LDR | $^{125}\text{I}$  | 15 MBq         | Permanent    | 35 keV                    | 3 cm                                  |
| HDR | $^{192}\text{Ir}$ | $\sim 100$ GBq | Temporary    | 380 keV                   | 10 cm                                 |



## EQUALIZATION



## HDR MEASUREMENTS



## SOURCE LOCALIZATION

